

WHAT IS CLAIMED IS:

1. A torque reaction control jig that is adapted to transfer reaction torque from a drive member to a support member upon tightening of a nut onto a threaded member, said jig comprising:
  - a jig body, said jig body including an adaptor portion that is adapted to be secured to the drive member in a non-rotatable fashion;
  - an alignment member extending from the jig body, said alignment member being adapted to slidably receive a portion of said support member; and,
  - a barrier member secured to said jig body and serving to engage the support member should said alignment member be out of alignment with said support member, engagement between said barrier member and said support member preventing further tightening of the nut onto the threaded member.
2. The torque reaction control jig according to claim 1, wherein said support member comprises a wheel and a series of wheel studs, said nut is a spindle nut, and said threaded member is an axle.
3. The torque reaction control jig according to claim 2, wherein said alignment member comprises a pair of cylindrical receptacles, and wherein said portion of said support member is a pair of adjacent wheel studs, each of said pair of adjacent wheel studs being slidably received in an associated one of said cylindrical receptacles.

4. The torque reaction control jig according to claim 3, wherein said barrier member extends between said cylindrical receptacles and is in a position to engage an outer end of one of said wheel studs when said jig is out of alignment with said wheel.

5. A torque reaction control jig that is adapted to transfer reaction torque from a drive member to a wheel upon tightening of a spindle nut onto an axle, said jig comprising:

a jig body, said jig body including an adaptor portion that is adapted to be secured to the drive member in a non-rotatable fashion;

an alignment member extending from the jig body, said alignment member comprising a pair of stud nests that are each adapted to slidably receive a wheel stud; and,

a barrier member secured to said jig body and serving to engage the wheel stud should said alignment member be out of alignment with said wheel, whereby engagement between said barrier member and said wheel prevents further tightening of the spindle nut onto the axle.

6. The torque reaction control jig according to claim 5, wherein said stud nests are generally cylindrical, and include a beveled annular surface that serves to guide the wheel stud into a central bore defined by said stud nest.

7. The torque reaction control jig according to claim 6, wherein said barrier member is disposed between said stud nests.

8. A method for tightening a spindle nut on an axle to secure a wheel to said axle, said wheel having a plurality of wheel studs extending therefrom, comprising the steps of:

providing a torque reaction control jig between a drive member and a drive socket, said drive socket being rotatably driven by said drive member, said jig comprising:

a jig body,

an alignment member that is adapted to receive at least two of said wheel studs when said jig is properly aligned with said wheel studs; and,

a barrier member that is adapted to engage one of said wheel studs when said jig is improperly aligned with said wheel studs;

aligning said wheel studs with said jig such that said wheel studs are positioned for receipt by said alignment member;

placing a spindle nut on said drive socket and engaging said spindle nut with said axle;

operating said drive member so as to rotate said drive socket and spindle nut to turn said spindle nut onto said axle while drawing said jig toward said wheel and thereby receiving said wheel studs by said alignment member.

9. The method according to claim 8, comprising the further step of:

transferring reaction torque from the drive member, through the jig, and to the wheel when the spindle nut tightens the wheel to the axle.